

## **Appendix A: Stormwater Management Area Assessments and Maps**

USEPA recommends that MS4s prepare a municipal assessment including water quality issues and existing land use patterns. Preparation of a municipal assessment helps the MS4 focus the SWMP to their particular community.

The County prepared an assessment of each community based on current land use maps and water quality information available from the RWQCB. The County noted general land use predominance and the location of major waterbodies for each community. Land use and water quality issues are described in general terms for each community in the following paragraphs.

### **Land Use and Water Quality Issues**

**Los Osos – Baywood Park:** Land use in Los Osos is composed primarily of single family residential areas. Secondary uses include public facilities, commercial retail and service, and open space/recreation. Commercial uses include auto repair, small restaurants, large and small retail stores, and self-storage. Water quality issues in Los Osos – Baywood Park include leaching from septic systems, proximity to the Morro Bay National Estuary, flooding and sumping in low-lying areas, and commercial runoff.

**San Luis Obispo Urban Fringe:** According to the County Land Use Element, this area is planned to provide open space preservation along with economic land uses. Land use in the urban fringe currently includes public facilities, recreational areas, agriculture, commercial retail, and residential, commercial service and industrial uses of various densities. Agricultural uses in the area include grazing and row crops. Commercial uses in the area include service stations, self-storage, auto body shops, lumber yards, raw materials supply stores, and trucking. Public facilities in the area include the San Luis Obispo County Airport which is currently regulated under a Phase I NPDES permit.

**Nipomo:** The primary land use in Nipomo is residential. Secondary land uses include public facilities, recreational facilities, and commercial service and retail. Residences in Nipomo are generally constructed on large lots, interspersed with more recent subdivisions with homes on smaller lots. Commercial uses are centered around the Highway 101 corridor and include larger stores with parking lots, professional offices, and commercial services. Recreational uses include parks and the historic Dana Adobe.

**Templeton:** Templeton is dominated by residential uses on larger rural parcels. In the commercial core between Highway 101 and the Salinas River, land uses include agriculture, industrial facilities, commercial establishments, and public facilities. Commercial uses in Templeton include retail, tourist services, and a large feed store. One of the primary industrial uses is the Templeton Stock Yard on North Main Street adjacent to the railroad. Public facilities include government buildings, community centers, schools and a hospital.



**Garden Farms:** Single family residences make up the majority of the land use in Garden Farms.

**Santa Margarita:** The primary land use in Santa Margarita is medium to low-density residential. Commercial uses line the main street, State Highway 58. The commercial uses are primarily home and auto related retail and service. A railroad right of way paralleling Highway 58 on its south side represents the sole industrial use in the community. Santa Margarita Creek borders the northwest corner of town adjacent to residential and commercial properties. Septic systems are the primary disposal system used. The local soil has a high clay content which, along with a high groundwater table, leads to poor percolation and occasional ponding.

**Cambria:** Land uses in Cambria include varying densities of residential, retail commercial, public facilities, agriculture, and open space. Commercial uses in Cambria that may have impacts to water quality include auto body shops, service stations, groceries, and restaurants. The commercial core called the “East Village” is built along Santa Rosa Creek, Cambria’s primary water body. Much of the residential development is densely clustered on slopes which increases the potential for erosion issues.

**Oceano:** Land uses in Oceano include commercial, residential, industrial, public facilities, agriculture, and recreation. The airport and a large industrial area border Arroyo Grande Creek. The airport is regulated under a Phase I NPDES permit. The industrial area houses businesses related to heavy trucking, produce packing, ice manufacturing, crate assembly and storage, and railroad shipping. Agriculture is limited to the Halcyon Preserve. Commercial retail uses are also minimal. Commercial services include auto body and light manufacturing. Recreational uses include an RV park. Public facilities include schools and a fire station.

Detailed Land Use Category Maps can be found at the end of this Appendix. These maps can be viewed in higher resolution on the internet on the County of San Luis Obispo Planning and Building website at <http://landarch.larc.calpoly.edu/slocounty/lue.htm>.

### **Pollutants Associated with Land Use**

#### **Agriculture:**

The following pollutants are commonly associated with agricultural use:

- Pesticides and herbicides;
- Siltation and increased erosion due to cultivation causing removal of topsoil, clogging of waterbodies, and fish kill; and
- Fertilizers contributing nutrients such as nitrogen and phosphorus to runoff leading to eutrophication.

#### **Recreation:**

Recreational uses can result in the production of the following pollutants:

- Sewage discharge;



- Oil and gas;
- Pet wastes; and
- Siltation: Recreational vehicles, hikers, and bikers can cause erosion leading to siltation of adjacent waterbodies.

### **Residential:**

The pollutants below are often associated with residential uses:

- Chlorine: High levels of chlorine can be introduced into the environment when swimming pools are drained. High concentrations of chlorine are toxic to fish and wildlife;
- Oil and gas;
- Pesticides, herbicides, and fertilizers; and
- Hazardous household products.

### **Commercial:**

Commercial uses have the potential to produce the following pollutants:

- Chemicals including detergents and synthetic organic chemicals;
- MTBE which volatilizes (becomes unstable) in soil and leaches into groundwater: and
- Oil and grease.

### **Industrial:**

Several pollutants impacting water quality can result from industrial uses including:

- Heavy metals;
- Priority organics:
- Oil and gas; and
- MTBE

## **Waterbodies and Pollutants of Concern in the Stormwater Management Area**

### **Watersheds in the SWMP Coverage Area**

Nine watersheds cross San Luis Obispo County as shown in the figure below. The County boundary is shown in red. The watershed names and U.S.G.S. watershed hydrologic unit numbers are: 18030003 Middle Kern-Upper Tehachapi-Grapevine; 18030011 Upper Los Gatos-Avenal; 18030012 Tulare-Buena Vista Lakes; 18060003 Carrizo Plain; 18060004 Estrella; 18060005 Salinas; 18060006 Central Coastal; 18060007 Cuyama; and 18060008 Santa Maria.



From: U.S. EPA, "Surf Your Watershed" website at <http://www.epa.gov/surf>.



Three of these watersheds, the Central Coastal, Salinas, and Santa Maria watersheds are located in the SWMP coverage area as shown in the figures below.

Cambria, Los Osos – Baywood Park, San Luis Obispo, and Oceano are found in the Central Coastal Watershed.



Templeton, Atascadero, Paso Robles, Garden Farms, and Santa Margarita are located in the Salinas Watershed.





Nipomo is located in the Santa Maria Watershed.



Figures from: U.S. EPA EnviroMapper for Water

Table A-1 lists the waterbodies in the SWMP watersheds and the corresponding California Hydrologic unit name and number.



**Table A-1: Major Waterbodies in the SWMP Coverage Area**

<b>U.S.G.S . HYDROLOGIC UNIT AND #</b>	<b>CA HYDROLOGIC UNIT AND #</b>	<b>WATERBODIES IN THE SWMP COVERAGE AREA</b>	<b>SWMP COMMUNITY</b>
Central Coastal <u>18060006</u>	Estero Bay 310	Arroyo Grande Creek	Oceano
		Meadow Creek (tributary to Oceano Lagoon)	Oceano
		Los Osos Creek	Los Osos
		Morro Bay	Los Osos
		Perfumo Creek	San Luis Obispo Urban Fringe
		Froom Creek	San Luis Obispo Urban Fringe
		San Luis Obispo Creek	San Luis Obispo Urban Fringe
		Santa Rosa Creek	Cambria
		Monterey Bay National Marine Sanctuary	Cambria
Salinas <u>18060005</u>	Salinas 309	Atascadero Creek Salinas River Santa Margarita Creek Yerba Buena Creek	Paso Robles and Atascadero Urban Fringe, Templeton, Garden Farms and Santa Margarita
Santa Maria <u>18060005</u>	Santa Maria 312	Nipomo Creek Mehlschau Creek Deleissiques Creek Haystack Creek	Nipomo

Clean Water Act (CWA), Section 303(d) requires that States list waterbodies that are impaired for one or more beneficial uses. Waterbodies listed on the California 2002 CWA Section 303(d) List of Water Quality Limited Segments within the County's SWMP coverage area are shown in Table A-2 below. For a complete listing of all 303(d) listed waterbodies in San Luis Obispo County, refer to the RWQCB website at <http://www.swrcb.ca.gov/rwqcb3/TMDL/303dList.htm>.



**Table A-2: CWA 303(d) Listed Waterbodies in the SWMP Coverage Area**

SWMP COMMUNITY	303(d) LISTED WATER BODY	POLLUTANT/STRESSOR AND POTENTIAL SOURCES
<b>Atascadero/Paso Robles urban fringe, including Templeton, Garden Farms, and Santa Margarita</b>	<b>Atascadero Creek</b> Atascadero Creek flows southwest through the City of Atascadero.	<b>Fecal Coliform</b> <ul style="list-style-type: none"> <li>▪ Source Unknown</li> </ul> <b>Low Dissolved Oxygen</b> <ul style="list-style-type: none"> <li>▪ Source Unknown</li> </ul>
<b>Los Osos/Baywood Park</b>	<b>Los Osos Creek</b> Los Osos Creek is the major water body in the Los Osos Valley. Los Osos Creek drains the Los Osos and Clark valleys and runs westward to the southern portion of Morro Bay.	<b>Fecal Coliforms</b> <ul style="list-style-type: none"> <li>▪ Source Unknown</li> </ul> <b>Low Dissolved Oxygen</b> <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Pasture Grazing – Riparian and/or Upland</li> <li>▪ Urban Runoff/Storm Sewers</li> <li>▪ Natural Sources</li> </ul> <b>Nutrients</b> <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Irrigated Crop Production</li> <li>▪ Agriculture – storm runoff</li> <li>▪ Agricultural Return Flows</li> </ul> <b>Sedimentation/Siltation</b> <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Irrigated Crop Production</li> <li>▪ Range Grazing – Riparian and/or Upland</li> <li>▪ Agriculture – storm runoff</li> <li>▪ Hydromodification</li> <li>▪ Channelization</li> <li>▪ Dredging</li> <li>▪ Habitat Modification</li> <li>▪ Removal of Riparian Vegetation</li> <li>▪ Streambank Modification/Destabilization</li> <li>▪ Channel Erosion</li> <li>▪ Erosion/Siltation</li> <li>▪ Natural Sources</li> <li>▪ Nonpoint Source</li> </ul>
<b>Los Osos/Baywood Park</b>	<b>Morro Bay Estuary</b> The main water body of concern in the Los Osos area is the federally designated Morro Bay Estuary.	<b>Metals</b> <ul style="list-style-type: none"> <li>▪ Surface Mining</li> <li>▪ Nonpoint Source</li> <li>▪ Boat Discharges/Vessel Wastes</li> </ul> <b>Pathogens</b> <ul style="list-style-type: none"> <li>▪ Range Grazing – Upland</li> <li>▪ Urban Runoff/Storm Sewers</li> <li>▪ Septage Disposal</li> <li>▪ Natural Sources</li> <li>▪ Nonpoint Source</li> </ul> <b>Sedimentation/Siltation</b> <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Irrigated Crop Production</li> </ul>




SWMP COMMUNITY	303(d) LISTED WATER BODY	POLLUTANT/STRESSOR AND POTENTIAL SOURCES
		<ul style="list-style-type: none"> <li>Construction/Land Development</li> <li>Resource Extraction</li> <li>Channelization</li> <li>Channel Erosion</li> </ul>
<b>San Luis Obispo (urban fringe)</b>	<b>San Luis Obispo Creek</b> (below W. Marsh Street). San Luis Obispo Creek originates as a mountain creek near Cuesta pass. The creek then flows from northeast to southeast through San Luis Obispo and enters the Pacific Ocean at Avila Beach. The creek is about 15 miles long and varies in width from 1 to 20 feet. Water levels fluctuate from 1 to 3 inches during the summer to 1 to 2 feet during non-flood winter conditions. The watershed feeding the creek incorporates 84 square miles of the coastal slope of the Santa Lucia Mountains and eleven tributaries.	<b>Nutrients</b> <ul style="list-style-type: none"> <li>Municipal Point Sources</li> <li>Agriculture</li> <li>Irrigated Crop Production</li> <li>Agriculture – storm runoff</li> </ul> <b>Pathogens</b> <ul style="list-style-type: none"> <li>Source unknown</li> </ul> <b>Priority Organics</b> <ul style="list-style-type: none"> <li>Source Unknown</li> </ul>
<b>Nipomo</b>	<b>Nipomo Creek</b> Nipomo Creek flows nine miles south through the community of Nipomo to its junction with the Santa Maria River. The watershed for Nipomo Creek encompasses approximately 20 square miles.	<b>Fecal Coliform</b> <ul style="list-style-type: none"> <li>Agriculture</li> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul>
<b>Nipomo</b>	<b>Santa Maria River Watershed</b> The Santa Maria River watershed encompasses a drainage area of 1,881 square miles. The river length measures approximately 18 miles from Twitchell Reservoir to the Pacific Ocean. The river serves as a major source of groundwater for the agricultural and domestic users in the Santa Maria Valley.	<b>Fecal Coliform</b> <ul style="list-style-type: none"> <li>Agriculture</li> <li>Pasture Grazing – Riparian and/or Upland</li> <li>Urban Runoff/Storm Sewers</li> <li>Natural Sources</li> </ul> <b>Nitrate</b> <ul style="list-style-type: none"> <li>Agriculture</li> <li>Pasture Grazing-Riparian and/or Upland</li> <li>Urban Runoff/Storm Sewers</li> </ul>



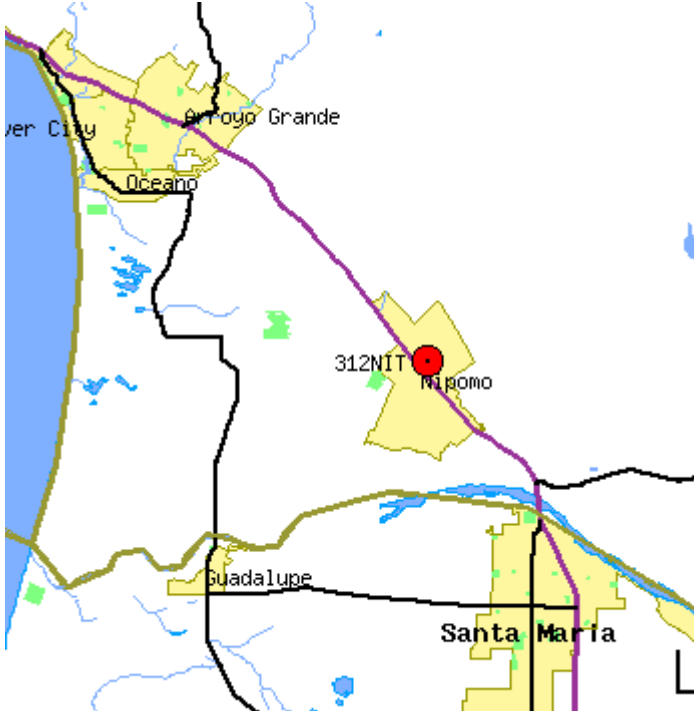

SWMP COMMUNITY	303(d) LISTED WATER BODY	POLLUTANT/STRESSOR AND POTENTIAL SOURCES
<b>Atascadero/Paso Robles urban fringe, including Templeton, Garden Farms, and Santa Margarita</b>	<b>Salinas River, upper confluence of Nacimiento River to Santa Margarita Reservoir</b> The Salinas River is approximately 150 miles long and runs from the Santa Lucia Mountains northwest to Monterey Bay. Land uses along the Salinas River are largely agricultural.	<b>Chloride</b> <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Pasture Grazing – Riparian and/or Upland</li> <li>▪ Urban Runoff/Storm Sewers</li> </ul> <b>Sodium</b> <ul style="list-style-type: none"> <li>▪ Agriculture</li> <li>▪ Pasture Grazing – Riparian and/or Upland</li> <li>▪ Urban Runoff/Storm Sewers</li> </ul>

The Central Coast Ambient Monitoring Program (CCAMP) is the Central Coast Regional Water Quality Control Board's regionally scaled water quality monitoring and assessment program. The purpose of the program is to provide scientific information to Regional Board staff and the public to protect, restore, and enhance the quality of the waters of Central California. The Central Coast Ambient Monitoring Program (CCAMP) provides water quality monitoring data on the internet at <http://www.ccamp.org>. Table A-3 shows the location of water quality monitoring data and monitoring site locations for waterbodies within the SWMP coverage area.


**Table A-3: CCAMP Monitoring Data for Waterbodies in the SWMP Coverage Area (where available)**

SWMP COMMUNITY	WATER BODY	CCAMP MONITORING SITES AND DATA (WHERE AVAILABLE)
<b>Cambria</b>	<b><u>Santa Rosa Creek</u></b> Water quality in this water body is of particular concern because the creek empties into the Monterey Bay National Marine Sanctuary. Samples out of range for this sample location: fecal coliform, chloride, total dissolved solids, pH, sulfate, and nickel in sediment.	<b>Location: Santa Rosa Creek at Moonstone Beach</b> More data at <a href="http://www.ccamp.org/ca/3/Sites/310sro/310SRO.htm">http://www.ccamp.org/ca/3/Sites/310sro/310SRO.htm</a> 




SWMP COMMUNITY	WATER BODY	CCAMP MONITORING SITES AND DATA (WHERE AVAILABLE)											
Nipomo	<p><b><u>Nipomo Creek</u></b> Samples out of range for this sample location: chlorophyll a, fecal coliforms, total coliforms, dissolved oxygen, and oxygen saturation.</p> <p>Overall CCAMP water body assessment for Nipomo Creek:</p> <table><tr><td>Cause(s) of Impairment</td></tr><tr><td>Nutrients</td></tr><tr><td>Salinity/TDS/Chlorides</td></tr><tr><td>Pathogens/Path.Indicators</td></tr><tr><td>Turbidity</td></tr><tr><td>Source(s) of Impairment</td></tr><tr><td>Agriculture</td></tr><tr><td>Natural Sources</td></tr><tr><td>Urban</td></tr><tr><td>Runoff/Storm</td></tr><tr><td>Sewers</td></tr></table>	Cause(s) of Impairment	Nutrients	Salinity/TDS/Chlorides	Pathogens/Path.Indicators	Turbidity	Source(s) of Impairment	Agriculture	Natural Sources	Urban	Runoff/Storm	Sewers	<p><b>Location: <u>Nipomo Creek at Tefft Street</u></b> More data at <a href="http://www.ccamp.org/ca/3/Sites/312nit/312NIT.htm">http://www.ccamp.org/ca/3/Sites/312nit/312NIT.htm</a></p> 
Cause(s) of Impairment													
Nutrients													
Salinity/TDS/Chlorides													
Pathogens/Path.Indicators													
Turbidity													
Source(s) of Impairment													
Agriculture													
Natural Sources													
Urban													
Runoff/Storm													
Sewers													
Oceano	<p><b><u>Arroyo Grande Creek</u></b> Drains Lopez Reservoir and flows southwest. The creek was constructed in 1959 by the Bureau of Reclamation to act as a flood control channel. The creek terminates at the ocean west of Oceano. Samples out of range for this sample location: fecal coliform, total coliform, total dissolved solids, dissolved oxygen, oxygen saturation, pH, and sulfate.</p>	<p><b>Location: <u>Arroyo Grande Creek at 22<sup>nd</sup> Street</u></b> More data at <a href="http://www.ccamp.org/ca/3/Sites/310arg/310ARG.htm">http://www.ccamp.org/ca/3/Sites/310arg/310ARG.htm</a></p> 											




SWMP COMMUNITY	WATER BODY	CCAMP MONITORING SITES AND DATA (WHERE AVAILABLE)
Los Osos - Baywood	<b>Los Osos Creek</b> Samples out of range for this sample location: fecal coliform, total coliform, conductivity, nitrate as N, nitrate as NO <sub>3</sub> , oxygen saturation, pH, and nickel in sediment. Overall CCAMP water body assessment for Los Osos Creek:	<b>Location: Los Osos Creek at Turri Road</b> More data at <a href="http://www.ccamp.org/ca/3/Sites/310syb/310SYB.htm">http://www.ccamp.org/ca/3/Sites/310syb/310SYB.htm</a> 
	<b>Cause(s) of Impairment</b>	
	Nutrients	
	Siltation	
	Organic Enrichment/Low Do	
	Habitat Alterations	
	Pathogens/Path.Indicators	
	Turbidity	
	<b>Source(s) of Impairment</b>	
	Agriculture – Grazing, Storm Runoff	
	Channel Erosion	
	Nonpoint Source	
	Irrigated Crop Production	
	Erosion/Siltation	
	Streambank Modification/Destabilization	
	Land Disposal	
	Hydromodification	
	Habitat Modification	
	Natural Sources	

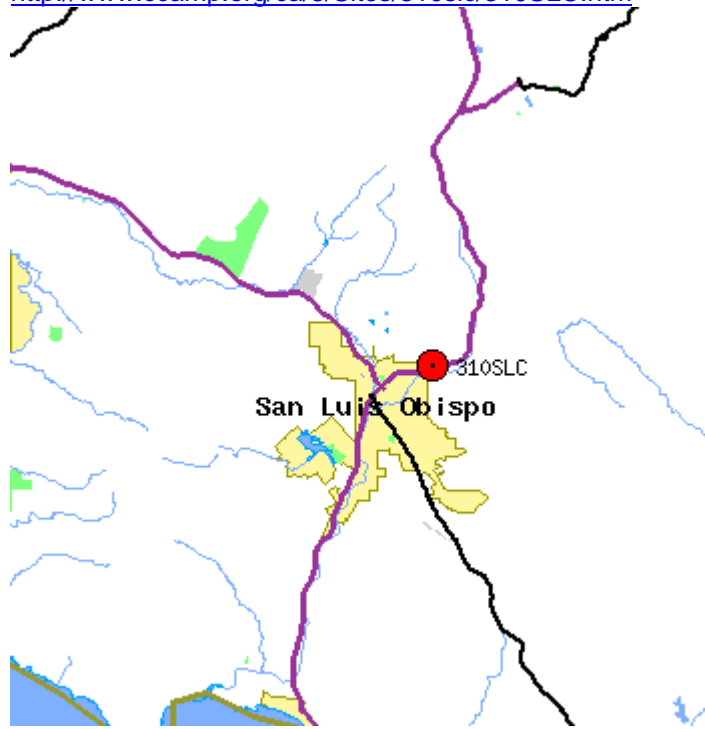


SWMP COMMUNITY	WATER BODY	CCAMP MONITORING SITES AND DATA (WHERE AVAILABLE)															
Los Osos- Baywood	<b>Morro Bay Estuary</b> Arsenic and total DDT in tissue samples were out of range for this sample location. Overall CCAMP water body assessment for Morro Bay: <table><tr><td><b>Cause(s) of Impairment</b></td></tr><tr><td>Pathogens/Path.Indicators</td></tr><tr><td>Metals</td></tr><tr><td>Siltation</td></tr><tr><td>Flow Alteration</td></tr><tr><td>Nutrients</td></tr><tr><td><b>Source(s) of Impairment</b></td></tr><tr><td>Resource Extraction</td></tr><tr><td>Urban Runoff/Storm Sewers</td></tr><tr><td>Agriculture</td></tr><tr><td>Boat Discharges/Vessel Wastes</td></tr><tr><td>Municipal Point Sources</td></tr><tr><td>Range Grazing-Riparian And/Or Upland</td></tr><tr><td>Irrigated Crop Production</td></tr><tr><td>Septage Disposal</td></tr></table>	<b>Cause(s) of Impairment</b>	Pathogens/Path.Indicators	Metals	Siltation	Flow Alteration	Nutrients	<b>Source(s) of Impairment</b>	Resource Extraction	Urban Runoff/Storm Sewers	Agriculture	Boat Discharges/Vessel Wastes	Municipal Point Sources	Range Grazing-Riparian And/Or Upland	Irrigated Crop Production	Septage Disposal	<b>Location: Sweet Springs Marsh</b> More data at <a href="http://www.ccamp.org/ca/3/Sites/310_23_00/310_23_00.htm">http://www.ccamp.org/ca/3/Sites/310_23_00/310_23_00.htm</a> 
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SWMP COMMUNITY	WATER BODY	CCAMP MONITORING SITES AND DATA (WHERE AVAILABLE)
<b>San Luis Obispo Urban Fringe</b>	<b>Perfumo Canyon Creek</b> Samples out of range for this sample location: fecal coliform, total coliform, nitrate as N, nitrate as NO <sub>3</sub> , dissolved oxygen, oxygen saturation, and pH.	<p><b>Location: Perfumo Creek at Calle Joaquin</b></p> <p>More data at:  <a href="http://www.ccamp.org/ca/3/Sites/310pre/310PRE.htm">http://www.ccamp.org/ca/3/Sites/310pre/310PRE.htm</a> </p>  <p>The map shows the San Luis Obispo area with the San Luis Obispo River (purple line) flowing through it. The city of San Luis Obispo is highlighted in yellow. To the west is the Baywood-Los Osos area, also in yellow. The ocean is shown in blue at the bottom. A red dot labeled '310PRE' marks the monitoring site on the river. A black line represents a major road, likely Highway 1, running through the city. Green areas represent undeveloped land.</p>



SWMP COMMUNITY	WATER BODY	CCAMP MONITORING SITES AND DATA (WHERE AVAILABLE)													
San Luis Obispo Urban Fringe	<p><b>San Luis Obispo Creek</b> Samples out of range for this sample location: fecal coliforms.</p> <p>Overall CCAMP water body assessment for San Luis Obispo Creek:</p> <table><tr><td><b>Cause(s) of Impairment</b></td></tr><tr><td>Nutrients</td></tr><tr><td><b>Source(s) of Impairment</b></td></tr><tr><td>Confined Animal Feeding Operations (NPS)</td></tr><tr><td>Urban Runoff/Storm Sewers</td></tr><tr><td>Agriculture</td></tr><tr><td>Irrigated Crop Production</td></tr><tr><td>Intensive Animal Feeding Operations</td></tr><tr><td>Range Grazing-Upland</td></tr><tr><td>Surface Runoff</td></tr><tr><td>Municipal Point Sources</td></tr><tr><td>Agriculture-Storm Runoff</td></tr><tr><td>Range Grazing-Riparian And/Or Upland</td></tr></table>	<b>Cause(s) of Impairment</b>	Nutrients	<b>Source(s) of Impairment</b>	Confined Animal Feeding Operations (NPS)	Urban Runoff/Storm Sewers	Agriculture	Irrigated Crop Production	Intensive Animal Feeding Operations	Range Grazing-Upland	Surface Runoff	Municipal Point Sources	Agriculture-Storm Runoff	Range Grazing-Riparian And/Or Upland	<p><b>Location: San Luis Obispo Creek at Cuesta Park</b> More data at: <a href="http://www.ccamp.org/ca/3/Sites/310slc/310SLC.htm">http://www.ccamp.org/ca/3/Sites/310slc/310SLC.htm</a></p> 
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Surface Runoff															
Municipal Point Sources															
Agriculture-Storm Runoff															
Range Grazing-Riparian And/Or Upland															

### Region 3 Basin Plan Beneficial Uses Definitions and Abbreviations

Beneficial uses for surface and ground waters are divided into the twenty standard categories listed below.

#### Municipal and Domestic Supply (MUN)

Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.

#### Agricultural Supply (AGR)

Uses of water for farming, horticulture, or ranching including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

#### Industrial Process Supply (PROC)

Uses of water for industrial activities that depend primarily on water quality (i.e., waters used for manufacturing, food processing, etc.).



#### Industrial Service Supply (IND)

Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.

#### Ground Water Recharge (GWR)

Uses of water for natural or artificial recharge of ground water for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers. Ground water recharge includes recharge of surface water underflow.

#### Freshwater Replenishment (FRSH)

Uses of water for natural or artificial maintenance of surface water quantity or quality (e.g., salinity) which includes a water body that supplies water to a different type of water body, such as, streams that supply reservoirs and lakes, or estuaries; or reservoirs and lakes that supply streams. This includes only immediate upstream waterbodies and not their tributaries.

#### Navigation (NAV)

Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels. This Board interprets NAV as, "Any stream, lake, arm of the sea, or other natural body of water that is actually navigable and that, by itself, or by its connections with other waters, for a period long enough to be of commercial value, is of sufficient capacity to float watercraft for the purposes of commerce, trade, transportation, and including pleasure; or any waters that have been declared navigable by the Congress of the United States" and/or the California State Lands Commission.

#### Hydropower Generation (POW)

Uses of water for hydropower generation.

#### Water Contact Recreation (REC-1)

Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

#### Non-Contact Water Recreation (REC-2)

Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.



#### Commercial and Sport Fishing (COMM)

Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.

#### Aquaculture (AQUA)

Uses of water for aquaculture or mariculture operations including, but not limited to, propagation, cultivation, maintenance, or harvesting of aquatic plants and animals for human consumption or bait purposes.

#### Warm Fresh Water Habitat (WARM)

Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.

#### Cold Fresh Water Habitat (COLD)

Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.

#### Inland Saline Water Habitat (SAL)

Uses of water that support inland saline water ecosystems including, but not limited to, preservation or enhancement of aquatic saline habitats, vegetation, fish, or wildlife, including invertebrates. Soda Lake is a saline habitat typical of desert lakes in inland sinks.

#### Estuarine Habitat (EST)

Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds). An estuary is generally described as a semi-enclosed body of water having a free connection with the open sea, at least part of the year and within which the seawater is diluted at least seasonally with fresh water drained from the land. Included are waterbodies which would naturally fit the definition if not controlled by tide gates or other such devices.

#### Marine Habitat (MAR)

Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).

#### Wildlife Habitat (WILD)

Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.



Preservation of Biological Habitats of Special Significance (BIOL)

Uses of water that support designated areas or habitats, such as established refuges, parks, sanctuaries, ecological reserves, or Areas of Special Biological Significance (ASBS), where the preservation or enhancement of natural resources requires special protection.

Rare, Threatened, or Endangered Species (RARE)

Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.

Migration of Aquatic Organisms (MIGR)

Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.

Spawning, Reproduction, and/or Early Development (SPWN)

Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.

Shellfish Harvesting (SHELL)

Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sport purposes. This includes waters that have in the past, or may in the future, contain significant shellfisheries.

The Beneficial Uses of the CWA 303(d) Listed Waterbodies in the SWMP coverage area are shown in the Table A-4 below.



**Table A-4: Beneficial Uses of the Waterbodies in the SWMP Coverage Area, From the RWQCB Basin Plan, September 8, 1994, Inland Surface Waters**

SALINAS HYDROLOGIC UNIT																						
Waterbody Names	MU N	AG R	PR O	IN D	GW R	RE C1	RE C2	WIL D	CO LD	WAR M	MIG R	SP WN	BI OL	RA RE	ES T	FRE SH	NA V	PO W	COM M	AQU A	SA L	SHE LL
Salinas R.,Nacimiento R.-S. Margarita Res.	X	X	X		X	X	X	X	X	X	X	X		X					X			
Atascadero Creek	X	X			X	X	X	X	X			X		X					X			
ESTERO BAY HYDROLOGIC UNIT																						
Santa Rosa Creek Estuary					X	X	X	X	X	X	X	X	X	X	X				X			x
Santa Rosa Creek	X	X		X	X	X	X	X	X	X	X	X		X		X			X			
Morro Bay Estuary				X		X	X	X	X		X	X	X	X	X				X	x		x
Los Osos Creek	X	X			X	X	X	X	X	X	X	X		X		X			X			
S.L.O.Crk. above W. Marsh St.	X	X			X	X	X	X	X	X	X	X		X					X			
S.L.O.Crk. below W. Marsh St.	X	X			X	X	X	X	X	X	X	X				X			X			
Froom Creek	X					X	X	X						X					X			
San Luis Obispo Creek, east fork	X	X			X	X	X	X	X		X	X		X					X			
Prefumo Creek	X	X			X	X	X	X	X		X	X		X		X			X			
Arroyo Grande Creek Estuary					X	X	X	X	X		X	X	X	X	X				X			x
Arroyo Grande Creek, downstream	X	X		X	X	X	X	X	X	X	X			X		X			X			
Oceano Lagoon						X	X	X		X		X	X	X					X			
Meadow Creek	X	X			X	X	X	X	X				X	X					X			
SANTA MARIA HYDROLOGIC UNIT																						
Santa Maria River	X	X		X	X	X	X	X	X	X	X			X		X			X			

**General Water Quality Issues in the SWMP Watersheds, From the RWQCB Central Coast Region 3 Watershed Management Initiative, January 2002 and Salinas River Watershed Management Action Plan, October 1999.**

**Nitrates**

“Increasing nitrate concentrations are a growing problem in the Salinas River Basin, Los Osos Creek Basin, the Santa Maria Valley, and near Arroyo Grande. Surface water problems are less frequently evident, although bacteriological contamination of coastal waters has been a problem in Morro Bay. Eutrophication occurs in the Salinas River below Spreckels and in the lower reaches of San Luis Obispo Creek.”

**Upper Salinas River Watershed**

“The upper Salinas watershed begins in the La Panza Range, southeast of Santa Margarita Lake and extends northwestward past the confluences of the Nacimiento and San Antonio Rivers to where the river narrows near the town of Bradley. The main subwatersheds of the upper Salinas River include the drainages of the Estrella, Nacimiento and San Antonio Rivers. The upper Salinas overlies the Paso Robles Groundwater Basin and lies mostly in San Luis Obispo County. Agriculture is the



primary land use within the upper Salinas watershed. Grazing, pasturelands and dry land farming have historically been the dominant land use in the upper Salinas watershed, but vineyards and wineries are becoming increasingly economically important. The impacts of grazing and vineyard development have not been well quantified. However, it is well known that grazing activities have historically altered waterways through the trampling and destruction of the riparian corridor. Urban development is occurring in the corridor along the Salinas River and Highway 101, particularly in the communities of Santa Margarita, Atascadero, Templeton and Paso Robles. Outlying suburban areas are being subdivided into one to five acre ranchettes. The population of north San Luis Obispo County is projected to increase from approximately 74,000 in 1994 to 104,650 by 2015. The increase in impervious surface area related to development and the encroachment of buildings in floodplains has increased the amount of water in the creeks, resulting in increased erosion and risk of flooding.”

“Other land uses in the upper Salinas watershed include recreational uses of the Nacimiento and San Antonio reservoirs, and military uses at Camp Roberts and Fort Hunter Liggett. Gravel and sand mining are increasing in the area. Gravel mining can have significant impacts on water.”

### **Morro Bay Watershed**

“The primary water quality concerns confronting Morro Bay are sedimentation, nutrient enrichment, bacterial contamination, and heavy metals. Several related problems, including habitat loss and degradation, and excessive water diversion exacerbate these water quality concerns.”

“Morro Bay is one of 28 estuaries participating in the EPA funded National Estuary Program (NEP), which provided funding to develop and implement a watershed plan to address these problems. Priority problems identified by the Morro Bay NEP include: sedimentation, bacterial concentrations, nutrient concentrations, fresh water reductions, heavy metal and toxics concentrations, and habitat loss.”

“Listed below are water quality issues in the Morro Bay watershed:

- Sedimentation and erosion control: Sedimentation has resulted in the loss of 25% of the tidal capacity of the bay in the last century, and is considered by many as the most serious problem confronting the bay.
- Pathogens: Bacterial contamination in Morro Bay has increased to a point where many of the shellfish growing beds are no longer viable. Bacterial levels exceed standards for shellfish growing in half of the sampled locations in the shellfish beds, and often exceed county and state limits for body contact recreation. The predominant sources of bacteria include failing septic systems, agricultural sources, recreational boaters, and urban runoff.
- Nutrient Enrichment: Groundwater nitrate levels in Los Osos and Chorro Creek basins are elevated, sometimes in excess of drinking water standards. Nitrates and



phosphates in surface water contribute to growth of nuisance algae and decreased dissolved oxygen levels in violation of Basin Plan water quality objectives. Sources include septic systems, fertilizers, urban runoff and animal waste.

- Heavy metals in sediments: Abandoned mines in the upper watershed bring sediments high in chromium, nickel and other metals into Morro Bay.”

### **San Luis Obispo Creek Watershed**

“The San Luis Obispo Creek Watershed encompasses the City of San Luis Obispo and extends to the Pacific Ocean near Avila Beach. The water quality problems facing this watershed include discharges associated with land development, hydromodification and agricultural land practices. Beneficial uses threatened or impaired by this water quality degradation include water contact and non-contact recreation, wildlife habitat, fish habitat and fish migration.”

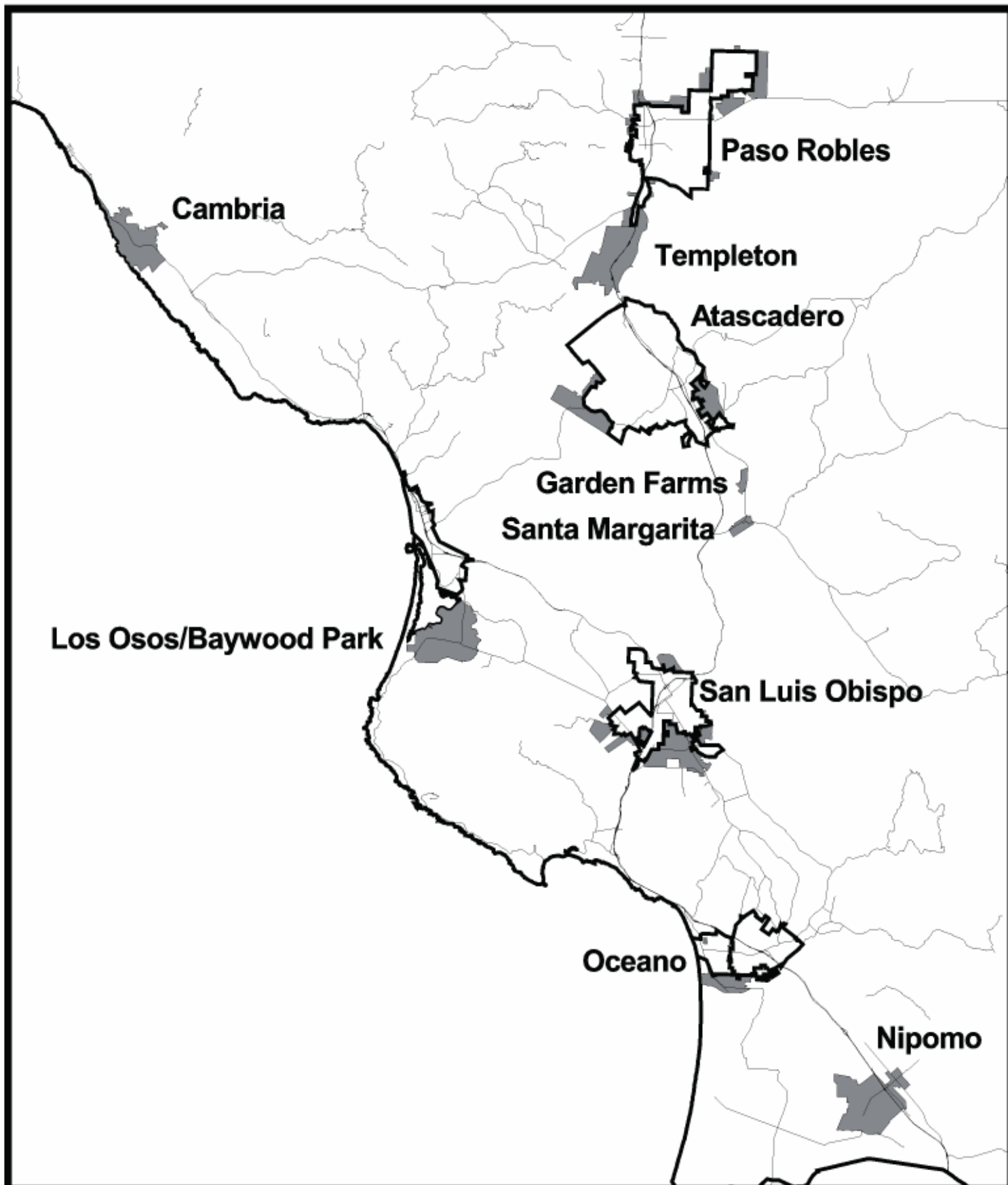
### **Santa Maria River Watershed**

“The Santa Maria River watershed is located in southern San Luis Obispo County and northern Santa Barbara County. The Santa Maria River watershed includes all areas tributary to the Cuyama River, Sisquoc River, and Santa Maria River. At 1,880 square miles (1.2 Million Acres) the Santa Maria River and its tributaries drain one of the larger coastal basins of California. Priority problems in the Santa Maria River watershed include nitrate contamination of groundwater, sedimentation, and habitat loss.”

### **Mapping of Jurisdictional Areas**

The management area assessment revealed that most of the development in each community occurred within the boundaries of urban and village reserve lines (URLs and VRLs). The County General Plan and Area Plans have established URLs and VRLs for each of the regulated communities. The reserve lines represent the twenty-year planning and growth boundary for each community and represent areas of higher density within a community. Outlying area were largely agricultural or rural residential in nature. The County therefore proposes that the SWMP jurisdictional boundaries be drawn at the URL or VRL of a particular community. Boundary maps for each of the regulated communities follow.



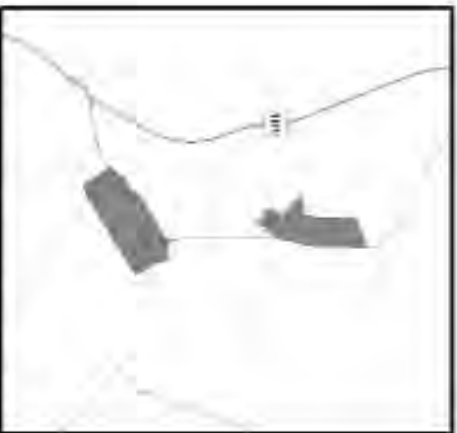


■ URL/VRL  
— City Limit

*San Luis Obispo County  
National Pollutant Discharge Elimination System  
Phase II  
Stormwater Management Program*

**Urban Reserve Line/Village Reserve Line Locations**





**Santa Margarita and Garden Farms**



**Paso Robles**



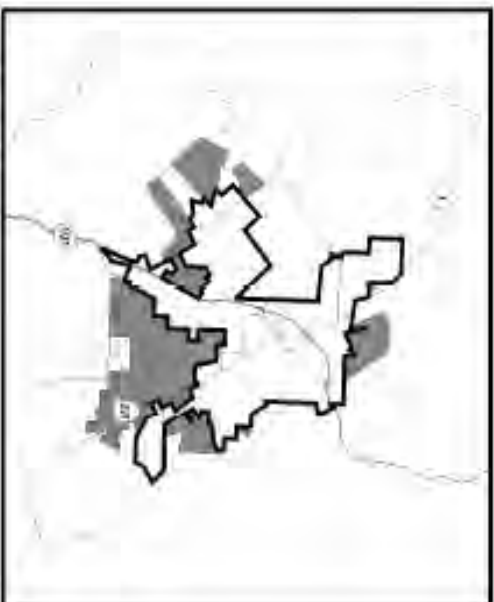
**Nipomo**



**Atascadero**



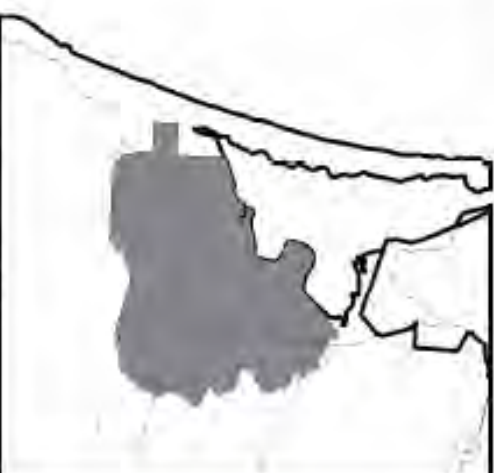
**Oceano**



**San Luis Obispo**



**Templeton**



**Los Osos/Baywood Park**



**Cambria**



No Scale

URL/VRL

City Limit

**San Luis Obispo County**  
**National Pollutant Discharge Elimination System**  
**Phase II**  
**Stormwater Management Program**

**Urban Reserve Line/Village Reserve Line**  
**Locations**





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*Integrating Information, Improving the Future*

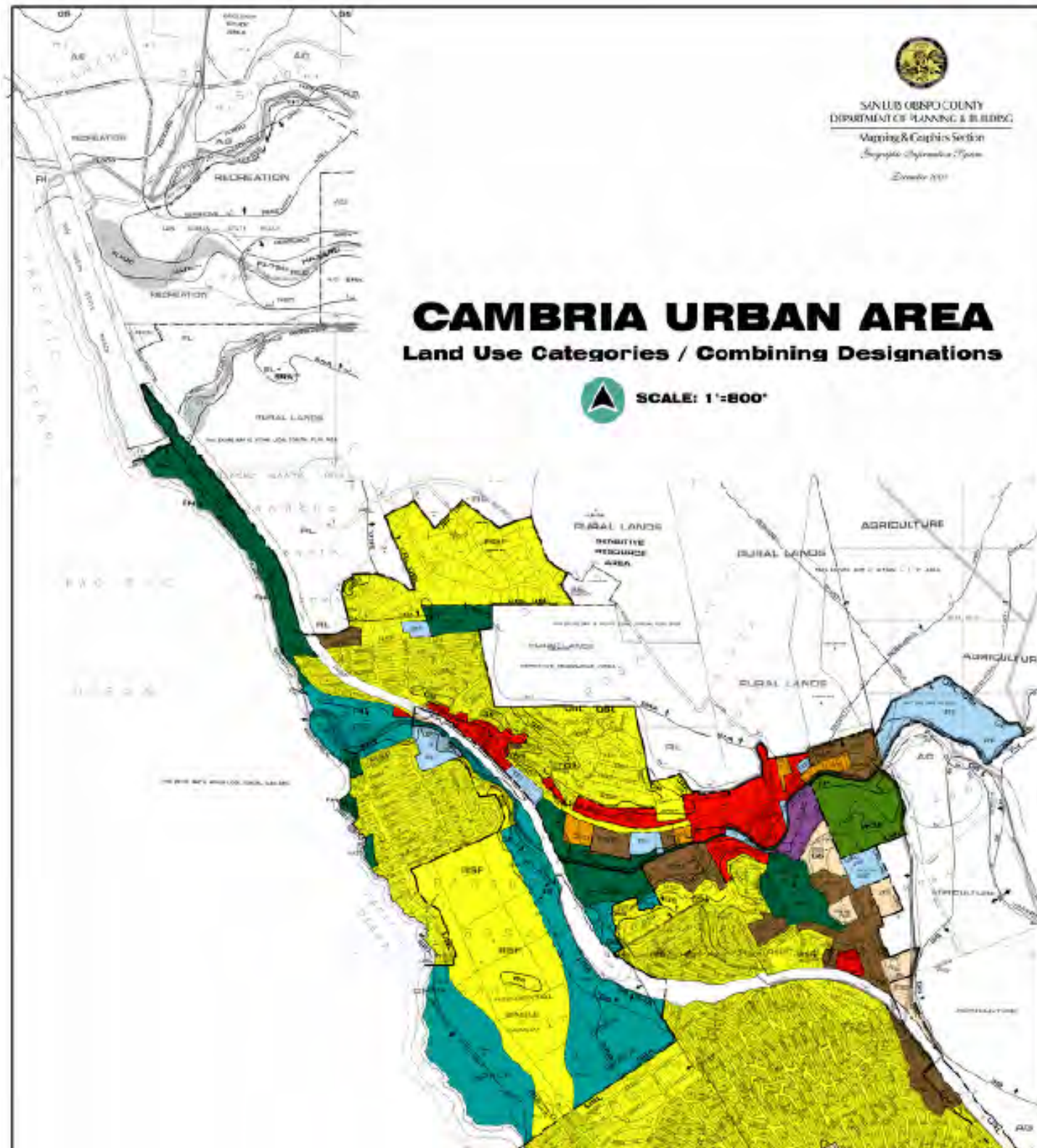
December 2007

# CAMBRIA URBAN AREA

## Land Use Categories / Combining Designations



SCALE: 1"=800'





# LEGEND

## BOUNDARIES

- Assessor Parcel
- Central Business District
- Urban Service Line
- Urban Reserve Line

## LAND USE CATEGORY

- Agriculture
- Commercial & Retail
- Commercial Services
- Industrial
- Office & Professional
- Open Space
- Public Facility
- Recreation
- Residential Multi-Family
- Residential Single-Family
- Residential Suburban
- Residential Rural
- Rural Lands
- Wildlands



0 500 1000 Feet



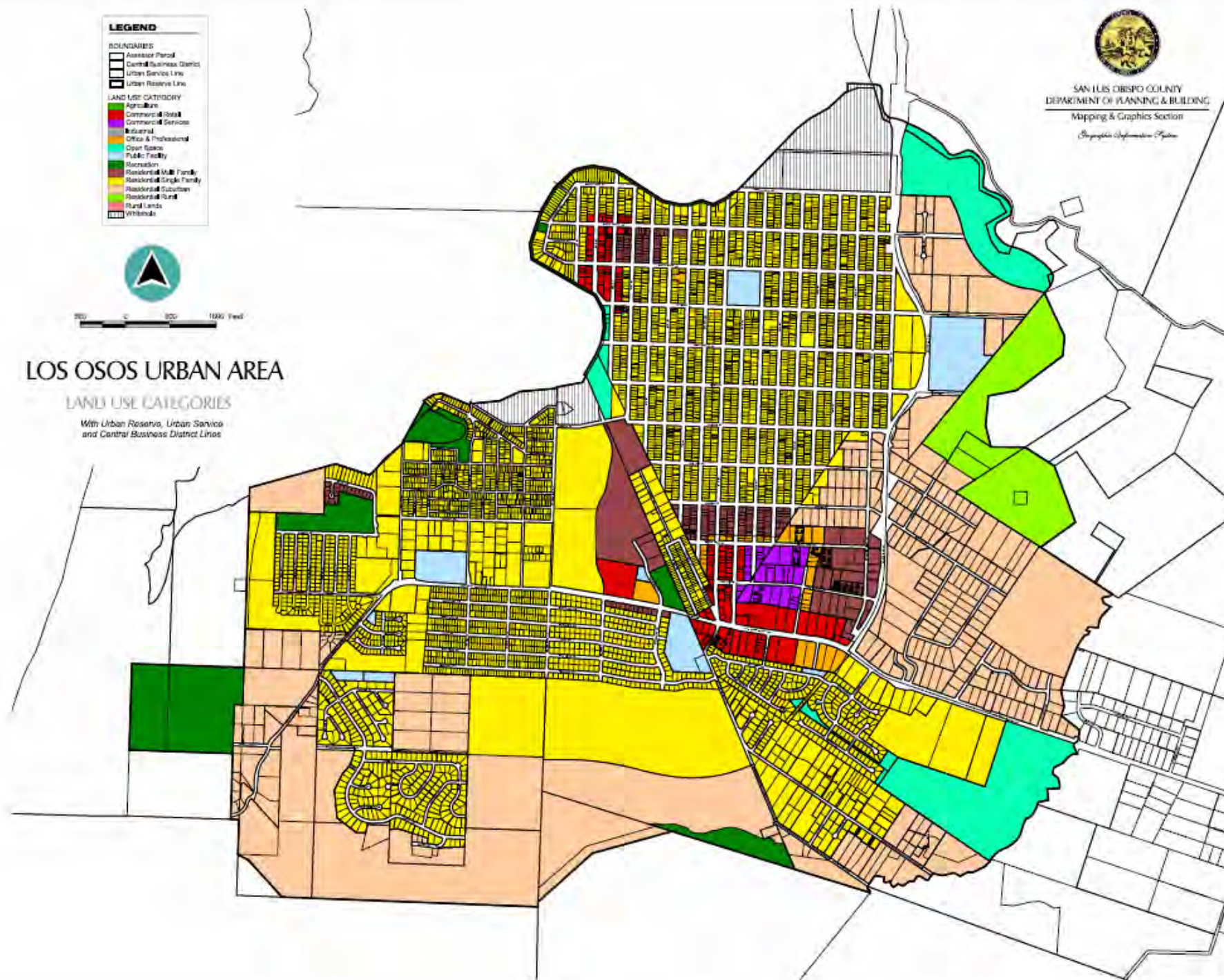
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*Geographic Information Systems*

## LOS OSOS URBAN AREA

### LAND USE CATEGORIES

With Urban Reserve, Urban Service  
and Central Business District Lines



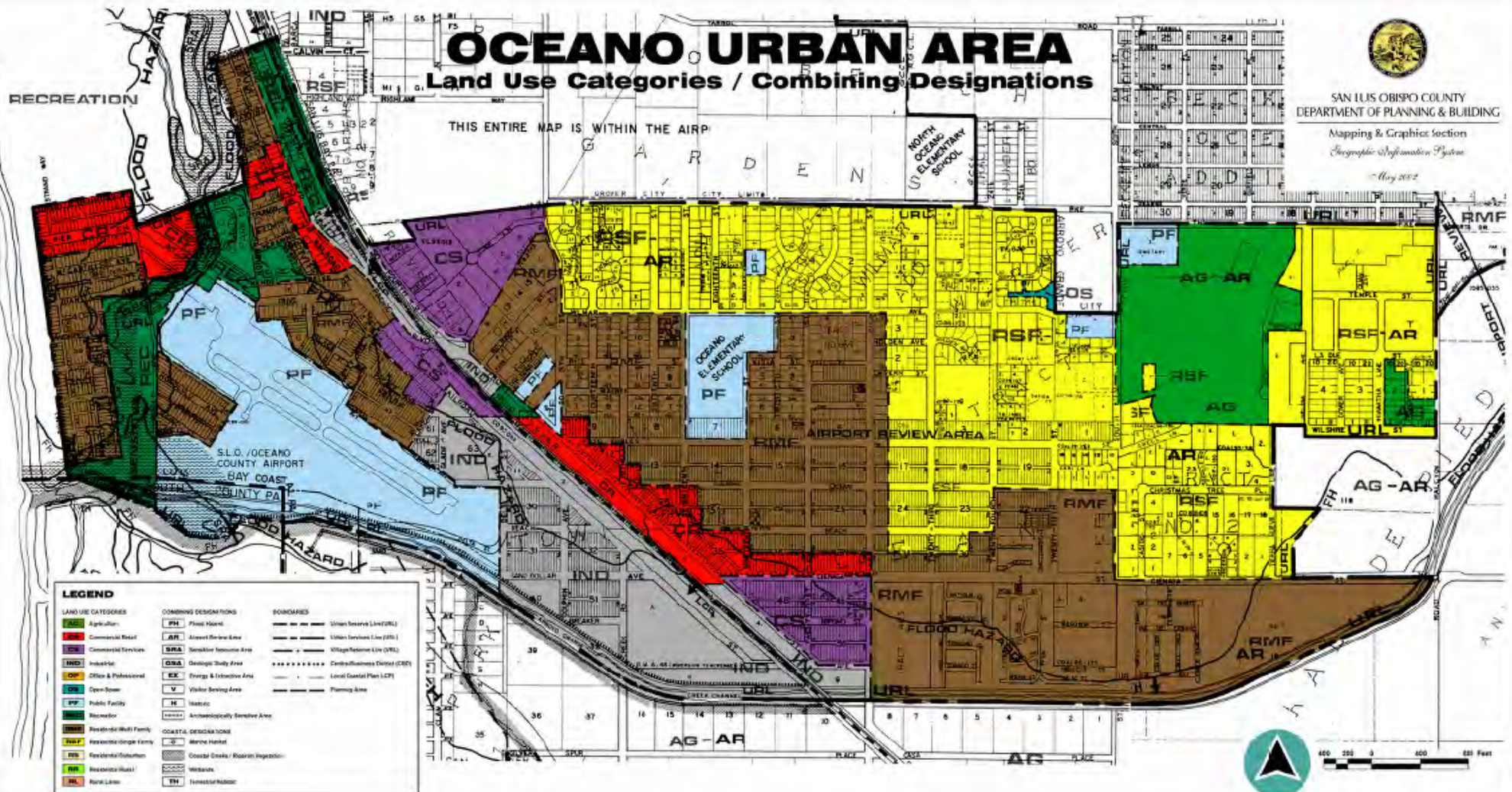


## Land Use Categories / Combining Designations

THIS ENTIRE MAP IS WITHIN THE AIRP



May 2002





**SCALE: 1"=800'**





### Land Use Categories / Combining Designations



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Mapping & Graphics Section  
*Geographic Information Systems*

### Discussion



# GARDEN FARMS VILLAGE AREA

## Land Use Categories / Combining Designations



SCALE: 1"=400'



### LEGEND

<b>LAND USE CATEGORIES</b>	<b>COMBINING DESIGNATIONS</b>	<b>BOUNDARIES</b>
Single-Family Residential	Single-Family Residential	Property Boundary (Owner's Survey)
Commercial/Industrial	Retail/Industrial	Unimproved Land (VRL)
Commercial/Industrial	Retail/Industrial	Unimproved Land (VRL)
Industrial	Retail/Industrial	Unimproved Land (VRL)
Office & Professional	Retail/Industrial	Unimproved Land (VRL)
Open Space	Retail/Industrial	Unimproved Land (VRL)
Public Space	Retail/Industrial	Unimproved Land (VRL)
Public Space	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)
Agricultural	Retail/Industrial	Unimproved Land (VRL)



SAN LUIS OBISPO COUNTY  
DEPARTMENT OF PLANNING & BUILDING

Mapping & Graphics Section

*Approved & Prepared by:*

*Signature*



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**SANTA MARGARITA URBAN AREA**  
Land Use Categories / Combining Designations

SCALE: 1"=400'

AGRICULTURE

FLOOD HAZARD

AG

FH

URL

RS

PP

UEL

T 24 S R 13 E

**LEGEND**

LAND USE CATEGORIES	COMBINING DESIGNATIONS	NOTES
AGRICULTURE	AG	General Agriculture
FORESTED LAND	FH	Forest Land
URBAN LAND	URL	Urban Land
RESIDENTIAL SINGLE-FAMILY	RS	Residential Single-Family
RESIDENTIAL MEDIUM-DENSITY	RM	Residential Medium-Density
RESIDENTIAL HIGH-DENSITY	RH	Residential High-Density
COMMERCIAL	CC	Commercial
INDUSTRIAL	IN	Industrial
UTILITY & PUBLIC USE	UP	Utility & Public Use
RECREATION	RE	Recreation
TRANSPORTATION	TR	Transportation
WATER	WA	Water
WETLANDS	WE	Wetlands
BARREN LAND	BL	Barren Land
DESERT	DE	Desert
UNDEVELOPED LAND	UL	Undeveloped Land
WATER	WA	Water
WETLANDS	WE	Wetlands
BARREN LAND	BL	Barren Land
DESERT	DE	Desert
UNDEVELOPED LAND	UL	Undeveloped Land

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January 1994

**SANTA MARGARITA URBAN AREA**  
Land Use Categories / Combining Designations

SCALE: 1"=400'

AGRICULTURE

FLOOD HAZARD

AG

FH

URL

RS

PP

UEL

T 24 S R 13 E

**LEGEND**

LAND USE CATEGORIES	COMBINING DESIGNATIONS	NOTES
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WATER	WA	Water
WETLANDS	WE	Wetlands
BARREN LAND	BL	Barren Land
DESERT	DE	Desert
UNDEVELOPED LAND	UL	Undeveloped Land
WATER	WA	Water
WETLANDS	WE	Wetlands
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UNDEVELOPED LAND	UL	Undeveloped Land

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Santiago, California  
January 1994

**SANTA MARGARITA URBAN AREA**  
Land Use Categories / Combining Designations

SCALE: 1"=400'

AGRICULTURE

FLOOD HAZARD

AG

FH

URL

RS

PP

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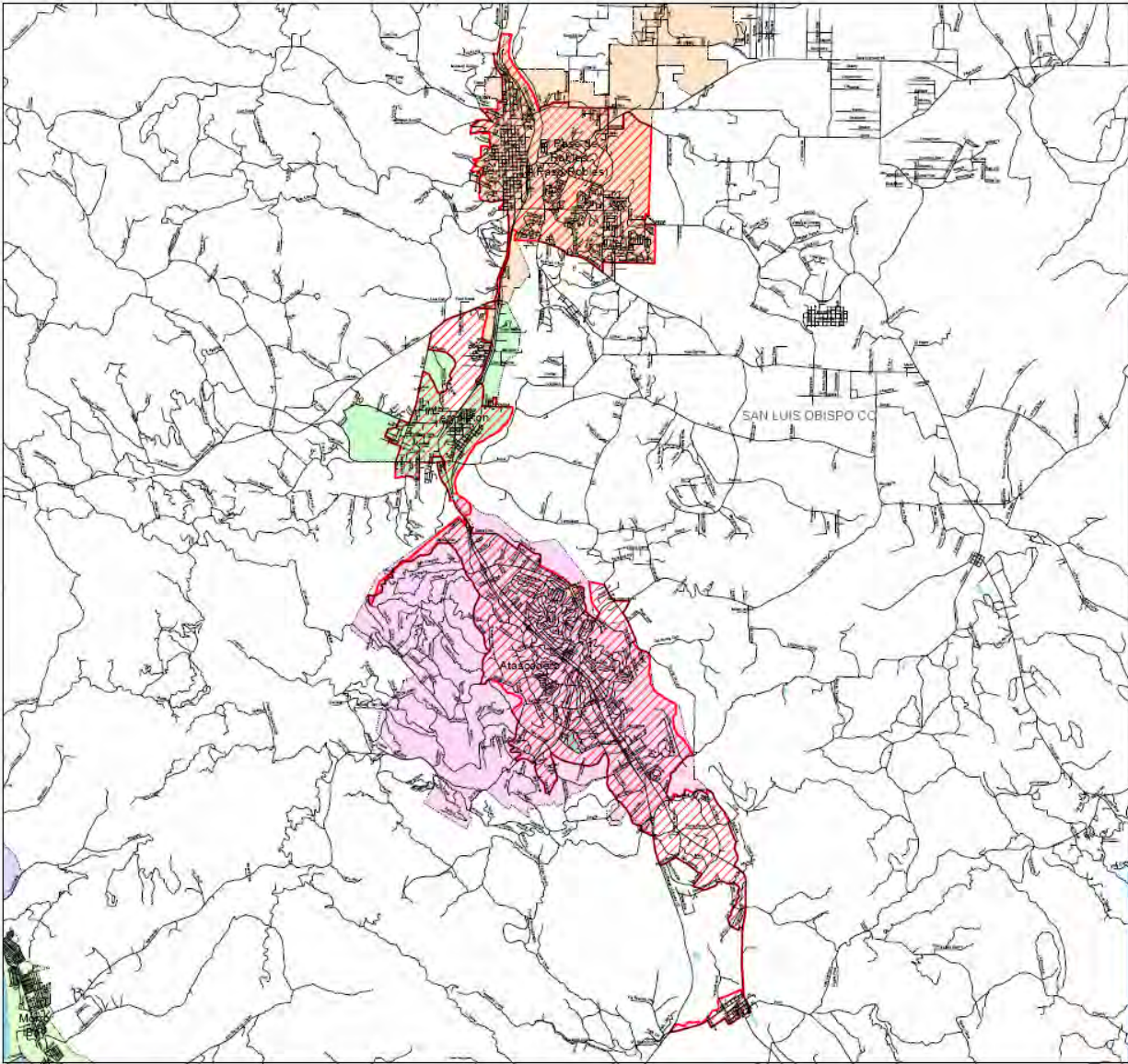
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**LEGEND**

LAND USE CATEGORIES	COMBINING DESIGNATIONS	NOTES
AGRICULTURE	AG	General Agriculture
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RESIDENTIAL SINGLE-FAMILY	RS	Residential Single-Family
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WATER	WA	Water
WETLANDS	WE	Wetlands
BARREN LAND	BL	Barren Land
DESERT	DE	Desert
UNDEVELOPED LAND	UL	Undeveloped Land
WATER	WA	Water
WETLANDS	WE	Wetlands
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DESERT	DE	Desert
UNDEVELOPED LAND	UL	Undeveloped Land


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Santiago, California  
January 1994









**Atascadero--El Paso de Robles (Paso Robles), CA Urbanized Area Storm Water Entities as Defined by the 2000 Census**

**2000 Census Urbanized Areas**

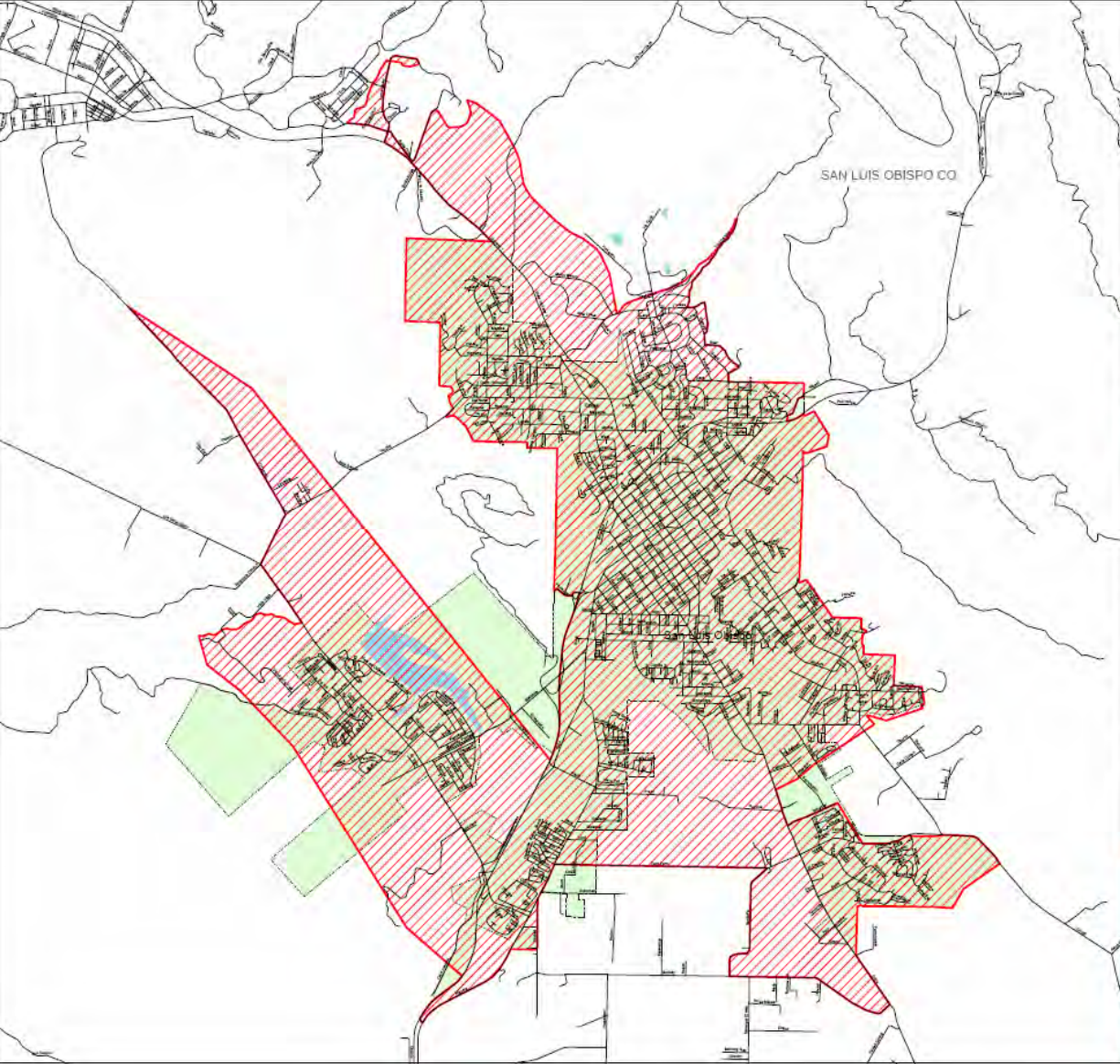
 Atascadero--El Paso de Robles (Paso Robles), CA

-  Municipal Boundaries
-  County Boundaries
-  Major Waterbodies
-  Roads

SOURCE: US Census Bureau TIGER data, 2000 Census


PROJECTION: State Plane Coordinate System - California IV Horizontal datum - NAD83





MAP DESIGN: August 21, 2002



**San Luis Obispo, CA Urbanized Area Storm Water Entities as Defined by the 2000 Census**

**2000 Census Urbanized Areas**

 San Luis Obispo, CA

-  Municipal Boundaries
-  County Boundaries
-  Major Waterbodies
-  Roads

SOURCE: US Census Bureau TIGER data, 2000 Census

PROJECTION: State Plane Coordinate System - California IV Horizontal datum - NAD83

MAP DESIGN: August 21, 2002

